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ABSTRACT

An overview of current developments in outdoor education and environmental studies in Canada is presented in this booklet. Compiled for the Canadian Education Association, the study reviews trends and developments since a similar survey was undertaken in 1969. The first half of the report traces the beginnings of outdoor education programs in Canada; defines outdoor education together with its objectives and values; evaluates use of the mobile classroom, primarily the school bus; suggests opportunities for creativity in all grade levels and subject areas; lists examples of what teachers are doing to enrich their programs in numerous disciplines; advises where to start a program and whom to contact for voluntary assistance; enumerates special problems encountered in teaching in the out-of-doors; and presents reactions from involved individuals--pupils, teachers, parents, and administrators. The second half is a resume of programs, plans, and problems in each of the provinces, followed by a sampling of special or unusual activities. Recommendations and final comments conclude the work accompanied by selected reference materials written by Canadian authors. (BL)

OUTDOOR EDUCATION IN CANADA - 1972

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The assistance of Imperial Oil Limited in making this travel-study possible is gratefully acknowledged.

Cover: British Columbian children learn about their mountain environment in a field trip, helped by resource people from the Canadian Forestry Association of B.C.

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environmental studies

by John Passmore

Canadian Education Association
252 Bloor Street West, Toronto 5, Ontario

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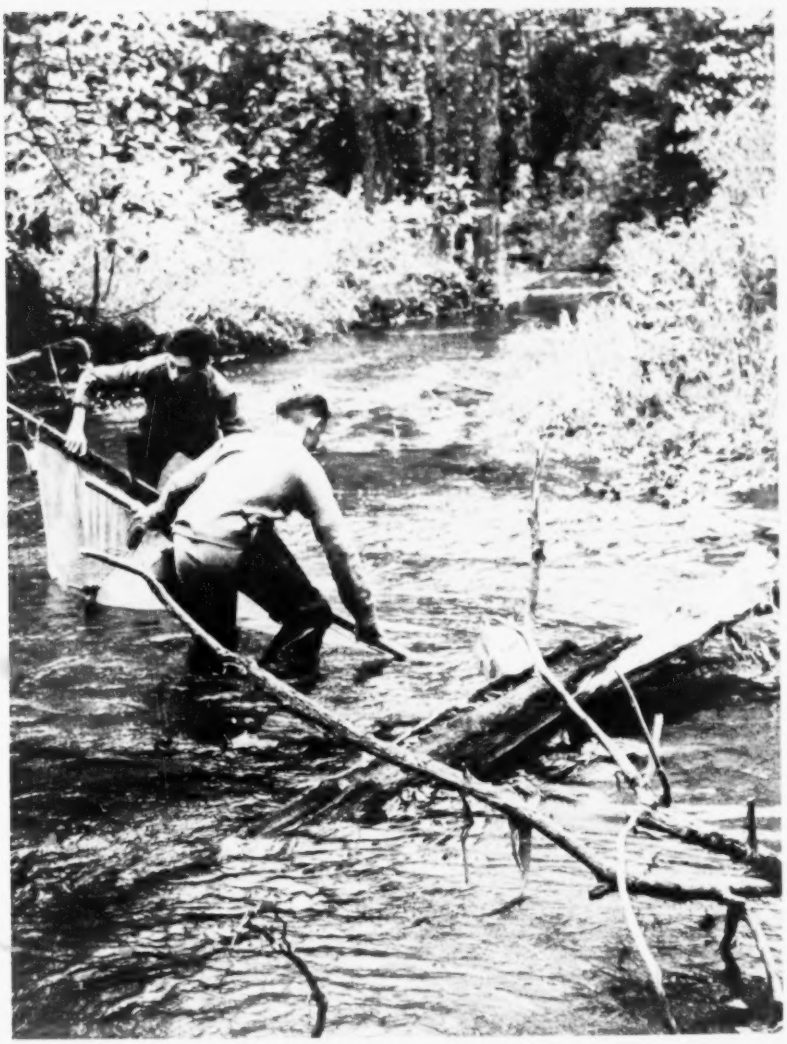


Foreword

The CEA is pleased to publish this booklet on outdoor and environmental education. The study was carried out by Professor J. H. Passmore of the Faculty of Education, University of Toronto, who was assisted by a grant from a travel fund provided to the CEA by Imperial Oil Limited.

More and more Canadian teachers are discovering the value of outdoor education as a method of learning through first-hand experience and discovery, and as a method of teaching which uses the real world as a "resource".

Concern for our environment is now widespread, and outdoor education is one way of making pupils more aware of pollution problems and land abuses, and of how our national resources can be wisely used. It provides our urban-oriented children with knowledge and experience of the natural world.

Outdoor education has only come into its own in Canada over the past few years, thus it was timely, we believed, to take a look at what kinds of outdoor education programs are now found in Canadian schools and how such programs have grown since the CEA's first survey on this subject in 1969.

This is why one of Canada's best-known and most involved outdoor educators, John H. Passmore, was eager to undertake this survey. Professor Passmore has long interested himself - and a good many others - in practicing and promoting camping, conservation and education in the out-of-doors. When he was Supervisor of Camping with the Ontario Department of Education in 1947-48 he helped set up their Leadership Training Program; and in 1967 he organized and directed the first conference in Canada on outdoor education at Geneva Park. He is also the co-author of several textbooks on health education.

F. K. Stewart,
Executive Secretary,
Canadian Education Association.

Introduction

During recent months I have had the opportunity of travelling across Canada, making a survey on present trends and developments in outdoor education and environmental studies.

Time, of course, did not permit me to observe at first hand all the programs being conducted or to meet all the people actively involved.

However, it did give me the opportunity of studying typical programs in each province and meeting well informed people who are providing significant leadership.

During my travels I was able to interview:

- teachers working at all levels of education from kindergarten through to post-university;

- educational administrators up to the Deputy Minister;

- school trustees, representatives of home and school and other community organizations;

- officials of many different departments of government, both federal and provincial;

- representatives of many voluntary and semi-official agencies concerned with conservation and other major environmental problems.

Probably most important of all, I was able to observe and participate in many different kinds of outdoor education classes and talk with the young people involved.

In my travels I was able to collect a great many

reports and studies that have been conducted locally and regionally. Through the co-operation of the library research section of the Faculty of Education, University of Toronto, it has been possible to study almost all published articles written by Canadians during the past five years on outdoor education and environmental studies.

A survey questionnaire was distributed to knowledgeable provincial representatives, who have provided essential information, and I am grateful for their assistance. My appreciation also goes to all the other people I met for their co-operation, interest and hospitality.

I have tried to avoid studying outdoor education in isolation from regular academic subjects and the total school educational program; and while I have attempted to be as objective as possible in reporting what I have read and seen and heard, it has been rather difficult to keep my personal interest and bias from periodically peeking through.

It seemed logical and important that I should ask two very basic questions as I travelled around:

How well do our present educational programs meet the needs and interests of all our students in our rapidly changing society?

What special contribution can well planned, carefully integrated programs of outdoor education and environmental studies make toward the students' total education?

Finally, although this study is being sponsored by the Canadian Education Association - whose interest and support I greatly appreciate - I must take full responsibility for all the information, conclusions, and recommendations made in the report.

John H. Passmore,
Professor of Outdoor Education,
Faculty of Education,
University of Toronto,
August, 1972.

In the beginning

"During my first year as a teacher I almost got fired for taking my rural school class on a nature study hike" - Dr. J. G. Althouse.

Our present outdoor education and environmental study programs probably had their beginning with that small group of teachers all across Canada who - like Dr. J. G. Althouse - "dared to be different", who believed in the educational value of arbour days, school gardening projects, nature study trips, athletic field days, and school camping.

There seems little doubt that these men and women were influenced by the early educational philosophies of the Greeks, and later writings of people like Comenius, Pestalozzi and Rousseau. They all believed in Julian Huxley's statement that "education must prepare growing human beings for the future, not only their own future, but that of their children, their nation and their planet."

The influence on our outdoor education programs of youth organizations, such as the Boy Scouts, Girl Guides and YM(W)CA's,must be recognized; as well as the contribution of many people in the organized camping field, such as Taylor Statten, C. E. Hendry, May Edgar and C. R. Blackstock in the 1930 era. The strong influence of leaders in the "day camp" movement is also much in evidence.

Canadians received a great deal of inspiration and assistance from leaders in the outdoor education and recreation field from the United States; from men like Dr. L. B. Sharp and Dr. J. B. Nash in the early years; and lately by associates such as Dr. Julian Smith and Dr. John Kirk.

Prior to World War II public concern over the

destruction of our natural resources was developing rapidly. One of the first and most successful voluntary youth training programs in conservation was initiated by Charles Wilkinson, manager of the British Columbia branch of the Canadian Forestry Association. By 1931 he had trained over 12,000 Junior Forest Wardens. And many other young people and adults became much more conscious of the importance of conservation because of the popular lecture tours of Robson Black, national vice-president of the same organization.

J. B. Harkin, our very first Commissioner of National Parks (1911-1936) was a dedicated senior civil servant who believed in the future of outdoor education. During his period of office he wrote, "I look forward to a time when our national parks will be recognized schools for the study of nature, history and geology ... places where children can get to know all sorts of living things at first hand."

Approximately 25 years ago this growing public interest in conservation resulted in minor curriculum changes in certain provinces. One of the first conferences on Education and Conservation was organized by Douglas Dadson and Kenneth Preuter at the Forest Technical School, Dorset, Ontario. The keynote speaker was Dr. E. G. Pleva of the University of Western Ontario. It is interesting to note that Dr. Pleva was one of the first university educators to strongly advocate - through his courses in geography - the importance of relating what is taught in the lecture rooms to what is happening in the world outside.

In the public sector, Mr. F. H. Kortright, a very knowledgeable and ardent conservationist, organized the first Canadian National Sportsman's Show. Through the years this highly successful venture has raised many thousands of dollars. And these funds have been used largely to support individuals and organizations involved in the broad field of conservation education.

During the post-war period a few youth training programs relating to the conservation of natural resources were introduced by the federal and provincial governments. In Ontario, two camp counsellor training programs were organized; the first in 1945 at the Ontario Athletic Commission Camp at Lake Couchiching, and another at Bark Lake in the Haliburton district.

The Ontario Forestry Association was one of the first voluntary organizations to become involved. In 1953, in co-

operation with the local industries, a special summer school program in conservation education was organized for the school systems of Dryden and Espanola.

A few years later, in 1957, the Manitoba Forestry Association organized a somewhat similar program for students in the Winnipeg area.

THE FIRST RESIDENTIAL PROGRAMS

Probably the first on-going school residential program in outdoor education in Canada was initiated by Robin Dennis for the Toronto Board of Education. Part of a regular school building on Toronto Island was converted to a natural science school for approximately 80 grade 6 pupils.

One of the first Canadian teachers to recognize the social and educational values inherent in a residential camping experience was Blanche Snell, a social studies teacher at York Memorial Collegiate Institute in Metro Toronto. Her pioneer efforts and enthusiasm had much to do with the establishment, in 1962, of the Albion Hills Conservation Field Centre by the Metropolitan Toronto and Region Conservation Authority.

The continued success of these two schools in the Toronto area has had a very strong influence on similar developments elsewhere in Canada. In addition to their school residential programs, these two outdoor centres have frequently been used for teacher conferences in conservation, outdoor education and environmental studies; and have been visited by hundreds of educators, trustees, and conservationists.

In 1965 a very significant breakthrough for outdoor education took place with the amendment of the Schools Administration Act in Ontario permitting school boards with an enrolment of over 10,000 students to buy land and operate natural science schools. (R.S.O. Section 66a.)

A further and very recent amendment, broadening the scope of this reference in the Schools Administration Act, was referred to in a speech in the legislature by the Minister of Education for Ontario on May 15, 1972. As this important decision will likely have a strong influence on the attitude of other provincial governments toward outdoor education, an extract from the speech of Ontario's Minister of Education, the Honourable Thomas Wells follows:

"There are provisions in this Act designed to

encourage natural science programs and outdoor educational activities. All school boards may now acquire land inside or outside their jurisdictions to operate such programs. Also, two or more boards may jointly buy land and build and operate facilities for a natural science program or other out-of-classroom activity.

"Or a board may make an agreement with a conservation or other appropriate authority to build facilities on property of the authority - and to conduct programs in co-operation with the authority."

This action by the Ontario government and similar policy changes being seriously debated in a number of other provinces clearly demonstrate that outdoor education and environmental study programs are well established, and that Canadian educators are recognizing that a very important part of a child's education can take place outside the classroom.

Alberta too has legislation, which became effective August 1, 1970, that encourages out-of-school excursions. Section 138 (c) of The School Act states that a school board may "arrange for, undertake or sponsor, for its pupils and at its own cost or otherwise, educational, cultural or recreational trips inside or outside its district or division."

It became very evident to me while I was travelling on my fact-finding mission that one of the unusual features about outdoor education in Canada is that it has clearly been a "grass-roots" development; that it has come about with relatively little encouragement and support from above.

But there has been a great deal of interest and activity from below. With certain notable exceptions, individual schools and teachers - often with a great deal of community support - have almost always taken the initiative.

Defining outdoor education

Because it is such an all-encompassing term, there will always be differences of opinion about what is meant by "outdoor education".

Some educational authorities prefer to use the expression "out-of-school" education. But this terminology causes even more confusion, because many of the activities conducted under this broad, educational umbrella are carried on "indoors". They often include very worthwhile student visits to such interesting places as museums, art galleries and science centres, where the teaching program is simply transferred from the school to another building.

Teachers with a special interest in ecology and environmental problems prefer to describe their programs as "environmental education" or "conservation education". Other teachers, particularly in the elementary school, simply talk about "field trips" directly applied to their class or a particular subject area.

And then again there are others who are strongly inclined toward exploration, challenge and adventure who use the terms "open country education" or "outward bound education".

One of the largest school boards in Canada was faced with this problem of interpretation in connection with an important survey recently conducted. Their research staff concluded that: *"Outdoor education is learning in and for the outdoors."*

They further clarified this definition by stating that it included real "outdoor" activities such as field study trips in science, geography, and nature study, and activities like camping and orienteering, but it did not

include trips to museums, factories, science centres, or school yard athletics. According to the response to our questionnaire, this definition would be acceptable to most Canadian teachers and educators.

However, we should not overlook the important implications for our schools of the recent United Nations conference on the Human Environment, and the serious attention that our federal and provincial governments are giving to the environmental crisis.

That is why it is timely to study the broader interpretation of outdoor education given by Dr. John Kirk at the first Geneva Park Conference in 1967.

"Outdoor education is the method that utilizes the out-of-doors to cultivate a reverence for life through the ecological exploration of the interdependence of all living things, one on the other, and to form a land ethic illustrating man's temporary stewardship of the land."

Milton McLaren of Simon Fraser University has also given a good definition:

"Outdoor Education generally is used to describe educational programs carried on in the out-of-doors, mainly in the form of residential outdoor school programs.

"There is also the problem of distinguishing between 'Environmental Education' and 'Outdoor Education'. Environmental education is now generally viewed as the generic term for all educational programs which focus upon the environment and man's interaction with and in it. It includes both urban and natural landscapes. It would include in-class, field trips, case study, and residential school experiences. It can include all subject areas. Outdoor education in many school systems' concept has most often meant outdoor <u>science</u> education, perhaps, with a heavy emphasis on conservation and ecology."

It is quite possible that in Canada during the next few years, much more use will be made of the term "environmental outdoor education".

OBJECTIVES AND VALUES

The objectives listed here are not the kind of formal objectives normally submitted with educational surveys. They really represent the values of outdoor education as

they have expressed by many regional and provincial committees. The classroom teacher should consider them desirable goals or guidelines on which to plan and build.

Outdoor education can:

Offer meaningful learning situations which should be an important part of every child's education.

Provide an opportunity for direct learning experiences which can enrich the school curriculum in all subject areas.

Stimulate students' curiosity and permit them to discover the excitement and satisfaction of learning out-of-doors.

Enable pupils to develop new interests and skills which can provide a basis for a lifetime of creative living.

Help them discover the important relationship that can and should exist between classroom instruction and outdoor learning.

Give them a much broader knowledge of ecological principles and their relationship to our quality of life.

Provide excellent opportunities to examine through personal experience many of our present social and cultural values.

Help pupils to develop a better understanding of themselves, their teachers, and their total education.

The mobile classroom

"Thanks for the bus,
It was full of us." - (Grade 1 pupil)

One of the most familiar sights around almost every school everywhere in Canada is the yellow school bus. (Originally they were used mainly in rural areas, but many large urban school boards also now have their own busing service.)

Although school buses (even those privately owned) are used extensively for out-of-school activities, policies vary a great deal. Most teachers and principals feel that buses are too hard to get and that there are too many restrictions attached to their use.

(For example, one large board permits almost unrestricted use of school board buses for inter-school athletics but only gives reluctant permission for their use for field trips.)

Easily available bus transportation is, of course, essential if a school is going to conduct a successful outdoor education program. A few progressive boards have equipped a bus as a mobile classroom, complete with audio-visuals, which can even serve as a science laboratory.

Quite a number of Canadian schools have purchased their own buses, using privately raised funds. The student council in one large school in northern Manitoba raised approximately $6,000 to purchase a second-hand bus. (The bus is driven by a qualified teacher and maintained in the motor mechanics shop.)

A few schools have converted second-hand buses into mobile outdoor education living quarters, and under the

guidance of a teacher with vision, have set out to explore the North American continent during holiday periods. These modern "Viking" vehicles are providing exciting and adventuresome trips across our vast (and largely unknown) country. Some of them have chugged their way from Newfoundland to the Yukon - and over the Rockies to the Pacific.

These are bold undertakings, requiring leadership from knowledgeable and dedicated teachers. But they are inspiring examples of providing imaginative ways to study at first hand the history, geography and ecology of our country.

A busful of eager Lakeview Outers (from Peterborough) set off for a camping experience in Ontario's bush country.

Opportunities for creativity

Many teachers involved in outdoor education are rediscovering the creative instinct that often lies dormant in many young people. Relatively little is known about the creative process itself, but we do know that everyone has the potential to be creative, and that creativity usually takes place as the result of stimulating experiences.

An imaginative teacher of any grade or subject can use the outdoor environment to provide challenging, satisfying creative opportunities. *Few people are aware of their potential interests and abilities until they are exposed to opportunities for developing them.*

A great many different kinds of creative activities go on in outdoor education programs; sensitive and observant children are given an opportunity to express their creative abilities through art, music, poetry and dramatics. Other primary grade pupils are creating a natural playground using ropes, poles, trees, stumps, etc.

Older pupils often like to work in groups and enjoy the challenge of solving a practical problem. It may be simply establishing a campsite, building a fire-place, or preparing a meal. Often it is an activity demanding knowledge and skill in the use of tools and here the vocational students come into their own, such as in building a rope bridge across a stream or erecting a permanent weather-proof shelter.

NEVER TOO YOUNG

Educational policies across Canada vary considerably on the appropriate grade level at which to introduce pupils to some kind of out-of-school experience. But where adequate provision can be made for safe transportation and

careful supervision, some boards of education are permitting all children - including those in kindergarten - to be taken on field trips.

Experience to date indicates that even the very young need to explore and discover the natural world. Kindergarteners are at the age where they can best begin to use all their senses. In the classroom they are largely restricted to seeing and hearing. What real joy and excitement they find in touching the soft fur of a rabbit, or smelling the bark of a cedar tree.

These Manitoba tots make a "direct discovery" about tadpoles and toads at the local pond under their teacher's guidance.

For all subjects and grades

It is easy to understand why outdoor education has made more impact in the elementary schools in all provinces than in higher grades. As the teacher in an elementary school is largely responsible for the instruction in all subjects to one particular class, the integration of teaching material is logical and practical. These teachers also are more aware of the individual interests and needs of their pupils, and can often better appreciate the social and educational values of field trip experiences.

The trend in our secondary schools has been for our teachers to become more highly specialized in one subject area. We seem to have assumed that knowledge comes in neat little packages that should not be mixed up. Far too often many teachers don't know and sometimes don't care what goes on in adjoining classrooms: an attitude that is not really the fault of the teacher but of the system.

It is a pleasure to report that the educational pendulum - at secondary schools and universities - seems to be swinging back toward greater integration. The value of interdisciplinary studies is now commonly being discussed at staff conferences and professional development meetings.

Here is where the outdoor education teaching method and philosophy come in. Here is where the outdoor environment serves as a catalyst to bring various subject areas together. Integrated field trips may be reversing a trend in education; a reversal that is long overdue.

Outdoor environmental studies offer an excellent teaching opportunity for the well qualified general practitioner in education; particularly if he has - in the words of Bruce Hutchison - "a 'dumb' love of the land", has a genuine interest in his students, and happens to possess

those personal qualities that inspire and create enthusiasm.

THE INTERDISCIPLINARY APPROACH TO TEACHING

Our survey has shown that although most teachers subscribe to the philosophy that outdoor education should be interdisciplinary, many also feel that a well planned field trip should often place the main emphasis on one subject area such as geography, history, or ecology.

Most outdoor educators - especially in the secondary school - are agreed that there is nothing wrong with this approach as long as teachers do not completely ignore other teaching opportunities; they emphasize that it would be wrong for the biology teacher to walk by the church graveyard, ignore the red-tailed hawk soaring above the meadow, or overlook the badly eroded hillside, on his way to the swamp with his class.

In many well planned field trips it is often difficult to tell where one academic boundary stops and another

Ice-fishing is a new experience for many Toronto grade 6's.

begins. But every teacher who takes a class outdoors for any purpose will find it a more rewarding and less worrying experience if he remembers one thing:

Pupils do not expect their teachers to know the answers to all their questions! And a skilful teacher can often use these "teachable moments" to great advantage in suggesting interesting individual or group research projects.

There are some subject areas that blend very naturally. A snowshoe hike for informal lessons in geography and nature study blends well with physical education. A weekend camping trip is ideal for art, music and creative writing - in addition to improving the students' skills in paddling, water safety, and camp cooking.

Teachers agree that extended field trips, particularly to another province, should be interdisciplinary undertakings. What an exciting and rewarding experience trips to Quebec are for the many students from other provinces who are majoring in history, geography and French!

In Edmonton a snowshoe hike leads to many nature discoveries.

What is being taught

There are now available a number of excellent teaching manuals prepared by boards of education and provincial teachers' outdoor education committees. These provide detailed information about how most subject area teachers can use the outdoors as an extension of the classroom.

But this report would not be complete without some reference to what many Canadian teachers are now doing to enrich their programs - and to provide direct learning experiences for their students.

Much of this information on what is being taught comes from leaders in the Canadian outdoor education field, from men such as Dave Cosburn, Jack MacKenzie, Bill Babcock, and Lloyd Fraser.

AGRICULTURAL SCIENCE

landscaping, drainage, leaching, soil analysis, land use, forest use, school gardening, animal ecology, study of a farm operation.

ART EDUCATION

landscape and tree sketching, oil and water colour painting, photography, the use of native materials in crafts and hobbies, clay modelling.

ENVIRONMENTAL SCIENCE

conservation, the ecology of a woodland, pond and bog, study of plants and animals in their natural relationships, water resources, problems of erosion, rock and tree identification, environmental pollution problems.

GEOGRAPHY (SOCIAL STUDIES)

landforms, mapping, effect of glaciation, drainage patterns, school weather stations, meteorology, history of the settlement of an area, tracing the development of an industry, a railroad, the fur trade, etc., the historical significance of a graveyard.

HEALTH EDUCATION

the effects of pollution - air, soil and water - on human health; the importance of outdoor education

in maintaining fitness of mind and body, health problems created by unrestricted population growth; first aid, accident prevention.

HOME ECONOMICS

planning and cooking meals out of doors, sanitation and garbage disposal, co-educational programs, preparing a budget for field trips.

INDUSTRIAL ARTS

care and use of tools outdoors, construction of bridges, cabins and other shelters, building bird-houses, boats and fibre glass canoes, planning creative playground equipment.

LANGUAGE ARTS

creative writing, imaginative story telling, writing poetry, preparing oral and written reports, dramatic presentations.

MATHEMATICS

data gathering, surveying, geometric measurements, mapping an area, height and diameter measurements, mathematics of stream and soil surveys, using a compass and transit.

PHYSICAL EDUCATION

campcraft skills, skiing, snowshoeing, canoeing, swimming, safety and survival, hiking, back packing and orienteering, open country games, individual sports.

To add to this rather incomplete list some teachers have developed very interesting programs in astrology, geology and rocketry; and others have placed a special emphasis on dramatic arts, music, French.

The informality of outdoor education permits the spontaneous development of wholesome co-educational recreations such as dancing, campfire programs, sing songs, etc. These are the occasions when an important and desirable change can take place in the usual teacher-pupil relationship.

There is an important place for fun and games in outdoor education.

Voluntary organizations: an untapped resource

Through the years teachers have seldom recognized, much less taken advantage of, the important contribution that can be made to a child's total education by the resources of numerous voluntary organizations. Here are vast untapped resources - of knowledgeable people, useful literature, and ready facilities. In addition to many excellent active youth organizations, such as the Boy Scouts, Girl Guides, YM(W)CA's ,there are found in most communities organizations concerned with promoting health, welfare, conservation and recreation. It is characteristic of our society that wherever a group of citizens develop common interests and concerns - a new voluntary organization emerges. So it was to be expected that during the last couple of years organizations concerned with pollution, population and other environmental problems have joined the scene.

It is through these voluntary organizations that teachers are able to obtain the kind of resource people they often need for their outdoor education programs. There are many knowledgeable parents who are willing to assist and who possess innate teaching ability - particularly with small groups. (One of the very best "teachers" of nature study observed during the survey was a parent with a grade 8 education.)

Almost every school board contacted in this survey has, in conducting feasibility studies, discovered that many voluntary organizations own and maintain facilities that can be used for outdoor education. Furthermore, they are willing to make them available at a very modest cost.

One example is Camp Samac near Oshawa, Ontario. This ideal facility was built for the Boy Scouts of Canada by the well-known philanthropist, Colonel Sam McLaughlin. It has excellent all-year accommodation for nearly 300 students -

readily available - but only recently has it been used by school authorities.

VOLUNTARY SERVICE BY STUDENTS

Many older students are seeking ways of offering voluntary service to those less fortunate than themselves. Most voluntary organizations, such as Senior Citizens, hospitals, the Canadian Red Cross and conservation authorities, need their assistance and welcome their participation.

Some schools, community colleges, and teacher education institutions, recognizing the social and educational value of voluntary service, have appointed staff members to co-ordinate this important work. Student response has usually been surprising and very gratifying.

There is little doubt that this kind of program is one of the most effective ways of bringing the school and community together - and has rather important implications for future educational programs.

This student - a Red Cross volunteer - reads to a veteran at Toronto's Sunnybrook Hospital.

Start where you are

What facilities do we really need? And how far do we have to travel?

There are two rather serious misconceptions about outdoor education that need correcting. They are that every school board must own and operate a fairly elaborate residential type of school, and that the value of an out-of-school experience is directly related to the distance from school that pupils must travel.

This is not necessarily so.

There is no doubt that a one-week "residential" experience of some kind is a worthy goal at which to aim. (Indeed, a special committee of one of the largest school boards in Canada recommended that this should be the objective for all pupils during each school year.) And it must be acknowledged that pupil visits to other communities, provinces, or countries can be very rewarding.

But it is also true that some of these ventures are of questionable educational value. They sometimes merely reflect our society's tendency to give our young people "too much too soon" and then we try to justify the travel caper as important to their education.

During the past year hundreds of Canadian children have been transported to Europe and other distant places - yet they have never seen places of important historical significance within 50 miles of their homes.

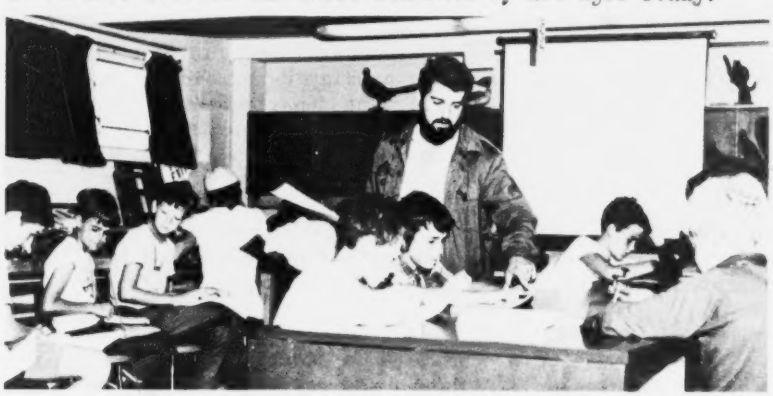
Some of the best and most exciting outdoor education programs I observed took place within easy commuting distance from the school. Some of them were simply well planned field trips, carefully integrated with students' regular classroom

work. And some excellent residential programs used only tents, or crude shelters; others used nearby outdoor facilities owned by local churches, Girl Guides, Boy Scouts, conservation authorities, or private camps within easy busing distance.

Many successful and experienced outdoor education people strongly urge beginning teachers to "start where you are" before going farther afield. This means using the school yard, the neighbourhood park or ravine, or the local conservation area.

It cost budget-minded Cobourg only $2,000 for this modest but effective prefabricated field centre.

The Albion Hills Conservation Field Centre, whose extensive facilities are shared by eleven school boards and the Metro Toronto and Region Conservation Authority, is equipped with an outdoor science lab where students of all ages study.



Some special problems

One of the biggest problems facing the experienced classroom teacher who ventures outdoors for the first time is how to discard traditional teaching methods. Teachers must recognize that they can *develop a completely new kind of teacher-pupil relationship without losing either the respect or control of their pupils.*

No teacher is capable of instructing 30 to 40 pupils outdoors. The ideal ratio is to have *one resource person, or qualified leader, for each group of eight to ten students.* When additional teachers are not available (and this is usually the case) other resource people must be found. Many parents are willing and able to assist, students from senior grades can be recruited or knowledgeable students from the class can be used as group leaders.

Many teacher education colleges have been reluctant to offer any training in outdoor education or even field studies. So, until recently, *few teachers have received the kind of preparation they need to teach outdoors successfully.*

Some school boards and teachers' federation committees are partially solving this problem by providing in-service training and workshops. But departments of education and all universities must offer many *more credit courses* relating to outdoor and environmental studies.

Teachers must recognize that *a great deal of planning and preparation is required* for every kind of outdoor lesson. Ideally the field trip should be carefully integrated with the classroom program that precedes and follows.

There must be a considerable amount of flexibility in the outdoor lesson. Although the geographic location of

the trip, the kind of equipment and assistance available, (and the weather) are important factors, the pupils' interest should largely determine the direction in which the lesson should go. The outdoor environment is ideal for discovering "teachable moments" and interesting projects for individual students and groups.

Every teacher should recognize that his pupils are going to ask many questions that he is unable to answer. Nobody can! But instead of causing the teacher embarrassment, many questions can be diverted into real learning situations. Let the pupils discover the answers themselves, even if it simply means their using one of the excellent readily available field study manuals.

Many youngsters, particularly those in the primary grades, are overflowing with energy and curiosity. Instead of trying to stifle them (an almost impossible task), a skilful outdoor education teacher provides lots of outlets for both. One highly successful teacher simply lets her grade 2 class "take off" for the first ten minutes of a half-day field trip - just running, climbing, or playing a game of tag. On the other hand, field trips should also provide opportunities for quiet meditation, for pupils to do their thing. They may simply want to relax under a tree, write a poem or story, or watch a pair of nesting robins.

For any trip some distance from the school, bus transportation is essential. It is considered to be a fairly expensive but necessary part of all out-of-school activities. There is some agreement across Canada that ultimately every large school should have the exclusive use of one bus every school day; that a school bus is really a portable classroom and should be a basic educational cost like a science laboratory, a gymnasium or a music studio.

Overnight trips, residential school programs, and extended trips to other cities, provinces, or countries, involve much more teacher planning and responsibility. These trips always require special permission from parents and various educational authorities, and must conform to established school policies. Teachers undertaking these kinds of trips for the first time should acquaint themselves with procedures recommended in various outdoor education manuals. They should also consult other teachers who have had experience in such ventures.

What do they say about outdoor education?

This section lists some interesting and significant comments about outdoor education from those involved in it - the pupils, teachers, principals, parents and trustees. We freely acknowledge that it is not an impartial cross-section of opinion. Most of the people who responded were enthusiastic and favourable. But obviously not all teachers, particularly in secondary schools, are outdoor education supporters.

Many of these comments are found in a survey of opinion on outdoor education done by the Metropolitan Toronto School Board, a study completed in 1970. Now, in spite of budget cuts, most school boards report that more teachers, pupils, and parents are involved in outdoor education than at that time.

What the teachers say

"My subject area (English) does not lend itself to this type of activity."

"I object because of the bloody mess it makes of everyone else's program."

"Things we talk about in class become realities and the students see the real significance of the ideas being presented."

"I discover things about my pupils, and they get to know me better, when we get out of the classroom and away from the school."

What the principals say

The general consensus among the principals reporting (who, incidentally, had an excellent response rate of

79%) is that outdoor education is worthwhile both for teachers and pupils. While the principals of elementary and intermediate schools were more positive about it, the reports from the secondary schools were still very favourable. And (outdoor education enthusiasts, please note) a large number of principals stated that they were giving outdoor education equal priority with other programs.

"Kids need to know that even school principals are human too."

"I have acted as a bit of a 'prodder' to get some teachers to attempt outdoor activities."

"The impression is that many teachers don't wish to give up the comfort of the classroom to tramp through mud in the ravine."

"Teachers' training regarding field trips at teachers' colleges must be nil."

What the parents say

The survey showed that 96% of the parents involved permitted their children to participate fully in the outdoor program. The small minority opposed consisted largely of parents from some ethnic groups who didn't understand what the program was all about - and were especially reluctant to send their daughters.

Many parents and teachers have done excellent work in bringing the school and the community together. The Home and School Associations are often directly involved in planning, fund-raising, and program supervision. Parents have frequently served as cooks, water safety supervisors, nature study instructors, etc.

In this day of participatory democracy and public concern over education, one of the important and unexpected contributions that outdoor education can make is to bring the school and the community much closer together.

"The extra cost concerned me until I discovered what outdoor education was all about."

"At last you teachers are leaving your ivory towers and are getting our youngsters into the real world."

"My wife and I have become much more concerned

about environmental problems since our teen-age son became involved in an air pollution research project."

"Sure it's cold! But I'm glad to help. Skiing is a great activity for youngsters to learn." (a comment from a young mother in Regina in 30^{o} below zero weather.)

What the pupils say

One of the most gratifying experiences for a parent or teacher is to tune in on the conversation of young people while returning home from any kind of a field trip. It is true that they are usually weary and excited - and happy to be out of school. But their honest reactions to what they have experienced come shining through.

Will they remember all that they have seen and done? Will everything they have learned directly relate to the geography or history lesson they are going to have tomorrow? Will they all become devoted conservationists?

Of course not! Maybe! Some might!

In outdoor education - as in general education - it is extremely difficult to predict what the outcome of any lesson will be. But most observers believe that direct learning experiences in the right kind of outdoor environment can add to pupils' knowledge, improve certain kinds of skills, and, possibly most important of all, influence their attitudes toward life and learning.

Here are some comments from the young people themselves, chosen at random from all across Canada.

"I really believe I'm going to like geography from now on."

"I used to think that a tree was only good for firewood."

"I don't ever want to go back to the city. Why can't we stay at the (residential) school for the rest of the year?"

"That was the first time I ever saw milk coming right from a cow!"

What the trustees say

Several long discussions were held with a number

of school trustees. These down-to-earth talks were necessary in order to give this survey both balance and perspective.

These trustees were very interested in the progress being made in other provinces in outdoor education and environmental studies, in the changes taking place in educational priorities, increasing educational costs, the high school drop-out problem, the lack of meaningful community participation in school programs, and the social and educational problems of young Canadians.

The material that follows - while not necessarily typical of educational policies in all provinces - provides dramatic evidence that trustees (and school boards) are beginning to recognize that:

- outdoor education has an important place in a modern educational system.

- all school buildings and facilities don't have to be under one roof.

- there must be more relevance in education.

Alberta School Trustees' Association Handbook (1972)

The ASTA's Handbook has some interesting policy statements under curriculum and instruction.

"The ASTA urges the Department of Education to develop curriculum studies of ecological and environmental problems and that studies relating to the environment become an integral part of the ongoing instructional program at all grade levels.

"The ASTA urges the Departments of Education and Environment to co-ordinate and co-operate on those activities involving environmental studies and curriculum development, and in promoting the education of children and adults on environmental conservation.

"The ASTA urges the Department of Education to include ecological concepts at all grade levels and in all appropriate subjects."

Metropolitan Toronto School Board

On September 7, 1971, the academic committee of the Metropolitan Toronto School Board recommended that "the

school board acknowledge the validity of the outdoor education program as outlined in the report and recommendations of the Outdoor Education Committee."

This committee's recommendations (to be implemented as financial and human resources permit) were as follows:

"1. To provide the following outdoor education experiences for all students:

"Elementary - part-day and day-long activities in parks, etc., plus optional overnight to week-long experiences;

"Intermediate - a minimum of one extended (2 to 5 days) session in a 'natural state' classroom, plus optional integrated use of regional, multi-purpose 'natural state' sites, plus optional free choice activities;

"Secondary - a minimum of one extended (2 to 5 days) session in an outdoor setting plus integrated use of regional multi-purpose site or sites designed for overnight use, plus optional more specialized activities.

"2. To provide the following professional development opportunities in outdoor education for interested teachers in the system:

(a) Released time for teachers to visit an outdoor education centre or area before taking their class there;

(b) Arrangements that permit teachers who will be doing follow-up activities with a class or classes to be present during the actual class visit to an outdoor education centre or site;

(c) Courses up to a week in length for interested teachers during the school year;

(d) An emphasis in professional development for outdoor education that commences with training teachers to make use of resources around the school.

"3. To appoint at least one person in each borough and the city to plan and co-ordinate the outdoor education program.

"4. To encourage area boards to develop outdoor education programs and facilities in co-operation with the Conservation Authority (and other government agencies) and to

report developments in this regard to the school board through the Advisory Council of Directors.

"5. To discontinue excessive use of asphalt or other paved surface in school yards so that at least a part of each school yard is available for outdoor education purposes.

"6. To request the provincial government to increase legislative grants for outdoor education sites and facilities to at least equal the amount provided in the case of conservation sites and facilities.

"7. To enable principals and teachers to carry out outdoor education programs by:

(a) encouraging flexibility in timetabling;

(b) providing the necessary transportation; and

(c) providing supply teachers as needed.

"8. To expand the insurance coverage of the area boards to include coverage for any liability incurred by teachers and other staff during overnight and extended outdoor education activities."

A survey of provincial programs, plans, problems

Selecting outdoor education activities worthy of special mention is a difficult task because there are so many interesting developments taking place from coast to coast.

NEWFOUNDLAND AND LABRADOR

As in the other Atlantic provinces, outdoor education programs in Newfoundland are largely in the planning and experimental stage. Considerable discussion has taken place on the desirability of integrating field study work in various subject areas; and the "Life Sciences" program has already been well received.

The Department of Education has broader responsibilities than in most provinces. This may prove to be an advantage. For example, the 4-H Club activities are coordinated by the Department of Education and Youth, and offer excellent opportunities for leadership training and field trips related to natural resources.

The province-wide community recreation program has been very well received. One of the real highlights in a mass recreation program (which includes the schools) is at Torbay near St. John's. On this former RCAF base an old barrack block has been converted into a very comfortable hostel for a youth travel program which is being planned.

Memorial University occupies a unique and important position in the educational and cultural life of Newfoundland. The various departments of this large post-secondary institution seem to be much more community-oriented than at other Canadian universities. This "community" philosophy has important implications for future developments in

environmental education.

Smallwood College in Labrador City has also introduced a number of innovative programs in outdoor education.

NOVA SCOTIA

Once school outdoor education programs are more widely accepted as a legitimate and desirable part of the total educational program in Nova Scotia, there will certainly be no problem about where to go and what to do. No province has more outdoor resources so close to hand.

There is already a good deal of interest in out-of-school activities around the Halifax-Dartmouth area. Special emphasis, quite naturally, is placed on visits to the museums and many other historically important places.

Increasing public concern over environmental problems on the Atlantic Coast is already having some impact on educational programs. Considerable financial support has already been received from the business world, and this highly desirable kind of partnership has important implications for future programs.

One of the main highlights of the tour of eastern Canada was a brief visit paid to the Nova Scotia Teachers' College at Truro to meet Ted Gittens, one of the most dedicated and resourceful environmental education teachers encountered anywhere in Canada. It was largely under his determined leadership that the "Manganese Mines Outdoor Education Centre" came into being. There is little doubt that this excellent outdoor facility, largely built through substantial support from business and industry, will provide a great deal of impetus in the development of outdoor education in Nova Scotia.

Dalhousie University offers a number of courses related to the broad field of environmental education. The Department of Physical Education has introduced a camping and outdoor education program somewhat similar to the Outdoor Pursuit Centre activity in Great Britain.

The Nova Scotia Department of Education is encouraging school boards to use facilities controlled by other provincial government departments, and by private and public camp operators. Consideration is being given to a number

of pilot projects that, if approved, will be jointly supported by the province, local school boards, and the students themselves.

PRINCE EDWARD ISLAND

Prince Edward Island is one of the first Canadian provinces to appoint to the Department of Education a full-time consultant in outdoor education. Under his direction a number of important developments have taken place.

A residential school program was introduced at Camp Buchan as a pilot project. The subject area emphasis is largely on mathematics, science, social studies and English - all of which are, of course, taught outdoors.

Formal evaluation of any outdoor education program is always difficult but the reaction of the staff and students to this residential experience is significant. The staff commented that, "when the structure of the traditional school is removed, children will act in a totally different and responsible way".

The attitude of the students was summed up nicely by one girl who participated: "My four days at Camp Buchan proved to be my most educational and enjoyable days I've spent since starting school. It really taught me to appreciate nature and to learn to grow up without my parents' help."

In Charlottetown the school board has made excellent progress in establishing a residential school. It is very evident that there is a great deal of community involvement, and this outdoor school will do much to encourage the development of outdoor education in the Island.

Although many voluntary organizations are involved in outdoor education all across Canada, the Water Safety Division of the Canadian Red Cross Society in this province has introduced a very unusual kind of outdoor education program. During the summer months, with the co-operation of the Department of Education and various community organizations, this popular province-wide program combines outdoor recreation and nature study. Leadership is largely provided by knowledgeable university students.

The Faculty of Education of the University of Prince Edward Island offers quite a number of credit courses in

outdoor education and environmental studies. This, again, is official recognition of the importance of providing the school with teachers who are comfortable and capable teaching outdoors.

NEW BRUNSWICK

Much of the initial leadership in outdoor education in New Brunswick has been provided by the provincial Camping Association. This reflects a fairly common national pattern: teachers interested and active in camping and other outdoor activities are the first to become involved in promoting outdoor education in the schools.

The universities in New Brunswick have begun to offer some courses designed to provide better academic background in ecology and environmental science for future teachers. The Physical Education Department at the University of New Brunswick and the Department of "Education Physique" at the University of Moncton are providing special training for their undergraduates, emphasizing outdoor recreation and camping skills.

Schools in the large communities are beginning to recognize the value of field trips. The classroom teachers are receiving excellent co-operation from provincial departments concerned with natural resources; and are beginning to make greater use of the national and provincial parks in the province.

The family division of the YMCA in New Brunswick has established a very interesting program at Centennial Day Camp in Moncton. This program is open to all young people for a nominal fee and operates on Saturdays throughout the year.

The Teachers' College at Fredericton has introduced, largely on a voluntary basis, an interesting outdoor education program. Particular emphasis is placed on learning the special skills such as camping and canoeing. (Canoe trips down a river can provide lots of opportunity to study the history, geography and ecology of the area.)

In many places in Canada, private enterprise has played an important role in the development of outdoor education. Nowhere is this better illustrated than at the Sunbury Shores Arts and Nature Centre at St. Andrews-by-the-Sea. This highly successful program, where emphasis is

placed on creativity in many kinds of arts and crafts, as well as on natural sciences, is starting its eighth season for children and adults.

QUEBEC

Outdoor education programs at both elementary and secondary schools are being strongly encouraged by the Quebec Department of Education. Education in the out-of-doors here, as in other provinces, has only in recent years been used to supplement and reinforce classroom instruction.

In this province, camps, both publicly and privately owned, are being used extensively by schools, as are other facilities made available through government departments concerned with resource management.

Historic ties with other communities in Canada of French-Canadian origin are being revived through well organized pupil exchange programs; and there continues to be considerable emphasis on student exchanges between Quebec and other Canadian provinces which have long recognized the cultural and educational value of exchanges.

Further evidence of the Quebec government's commitment to outdoor education and environmental studies is the appointment of a full time director for their "Plein Air" program. Under his direction a series of teaching manuals has been prepared for elementary school teachers:

"Cette série d'émmissions propose aux titulaires et aux élèves la découverte du 'plein air'. Par des expériences concrètes d'apprentissage, on veut mettre l'enfant en contact étroit avec les éléments; le vent, l'eau, le rocher, la neige."

A special manual has also been prepared for secondary school teachers. This material is largely devoted to outdoor vacation activities such as skiing, winter camping, mountain climbing and canoeing. Special information is available to help teachers in organizing various kinds of outdoor clubs.

Schools administered by the Protestant School Board of Greater Montreal and Lakeshore Regional School Board, for instance, have made a very good beginning. It is estimated that about 10% of all pupils attending Protestant schools are involved in some kind of outdoor education program,

with most of the leadership coming from the biology, general science and physical education departments. Many schools in the Montreal area make extensive use of the Arundel Tree Farm and the Macdonald College Arboretum.

One of the largest (2,285 acres) outdoor education centres anywhere in Canada is the Mont St. Hilaire Nature Centre located high above the Richelieu River. This magnificent property, bequeathed by Andrew Hamilton Gault to McGill University in 1953, has a tremendous potential. It includes within its boundaries almost every kind of outdoor resource needed for even the broadest kind of environmental study program; and it is within fairly easy commuting distance of thousands of pupils in the greater Montreal area.

A number of years ago a well-known educator from France, Georges Hébert, introduced a new kind of outdoor program to Quebec. "Hébertism" is a method of using all the natural resources - trees, streams, hills, etc. - for rigorous and challenging physical activities. This program has become quite popular in Quebec and has much to offer outdoor education programs in other provinces.

Wintertime classes de neige involve a half-study half-sport schedule for these Quebec students and teachers.

The Physical Education Department of McGill University was the first in Canada to recognize the value of the outdoors for a physical recreation program. Since the 1930's special one-week outdoor recreation programs have been held. The emphasis has been on the development of individual interests and skills in skiing, snowshoeing, golf, tennis, etc.

ONTARIO

Although many individual teachers and schools had experimented with different kinds of out-of-school programs much earlier, important progress in Ontario's outdoor education began in 1967 with the first Geneva Park Conference. Other conferences followed: on "Teacher Education", "Man and His Total Environment", "Education and the Environmental Crisis", and "Conservation and Education". They were all co-operative undertakings involving Ontario colleges of education, conservation authorities, the Ontario Department of Education, teachers' federations, and many voluntary agencies concerned with environmental education.

As in other provinces, it was recognized at the outset that the first and most important goals must be to offer better teacher training courses in outdoor education, and to encourage boards of education and the teachers' professional organizations to conduct badly needed in-service training programs.

Slow but steady progress has been made in providing outdoor education courses at teacher training institutions but one of the big success stories has been the response to outdoor education and environmental study programs for teachers initiated by local bodies, particularly by the Outdoor Education Committee of the Ontario Teachers' Federation.

The OTF Committee has produced two excellent outdoor education teaching manuals which have been widely used throughout Canada. Equally as important, this committee has organized regional committees and has sponsored a large number of highly successful weekend workshops throughout the province.

Numerous Ontario school boards now have well established outdoor education programs which are highlighted by their rapid growth and diversity. More full-time consultants and co-ordinators have been appointed to provide

the leadership and the direction that is needed in this fast-growing, interdisciplinary facet of education.

Schools have taken full advantage of the facilities and other resources so willingly made available by the approximately 40 conservation authorities throughout the province. Feasibility studies have revealed many other resources: parks, ravines, swamps, streams, reforestration areas, which are close at hand and are ideal for one-day field trips.

Residential programs have increased rapidly. And extensive use is made all year round of accommodation provided by camping organizations, government departments, and voluntary agencies. A considerable number of educational authorities have constructed their own residential schools. Some of these are fairly elaborate, but others are simply abandoned one-room rural schools, or prefabricated buildings.

In spite of restrictions recently placed on educational budgets in Ontario, it is heartening to note that outdoor education programs have continued to grow. Resourceful teachers and administrators (who have sometimes adjusted their spending priorities) are finding a way to provide transportation, establish more flexible timetables, and offer more and more pupils the opportunity of taking outdoor studies.

During the past year a new provincial organization that should have an important influence on future developments has been established. This is the Council of Outdoor Educators of Ontario, which not only represents teachers and other educators, but offers its membership to representatives of camps, government departments, voluntary agencies, and any group involved with environmental education. Their first main project is an international conference, "Education without Boundaries", being held at the Dorset Forest Technical School and Camp Kandalore in late September of this year.

Detailed information about many of the outdoor education programs (and problems) in Ontario is provided in many of the periodical articles listed at the end of this report.

MANITOBA

Outdoor education in Manitoba has also been a "grass-roots" development, starting with small workshops in 1965 and 1966. Eventually this led to the organization of the Manitoba Outdoor Education Association which has provided stimulating leadership in recent years.

The Manitoba Department of Education has adopted a permissive attitude toward the development of outdoor education programs. Legislation does not as yet allow school divisions to purchase property for outdoor education, but divisions are given a great deal of autonomy in transportation, programming, and the hiring of specially trained teachers.

The University of Manitoba, through their Faculty of Education, offers both graduate and undergraduate courses in outdoor education. These programs have been well received by an increasingly large number of student teachers every year.

Many schools in the Winnipeg area have taken advantage of the special program offered to them by the camping and outdoor education division of the YMCA. This is another demonstration of how the schools can make greater use of community resources that are provided at a modest cost with no capital expenses.

It is roughly estimated that about 25% of Manitoba's elementary schools and less than 10% of their high schools are at present offering outdoor education programs, but interest is increasing rapidly. Leadership is coming from the science, geography and physical education departments. About 300 classrooms throughout the province are using public and private camps (Arnes, Stephens, Wannacumboe, Pioneer, Manitou and Red Rock) for residential programs.

Manitoba has a number of unusual outdoor environments that are used by many schools for field trips - Carberry desert, the St. James-Assiniboia prairie area, northern Indian communities and the Canadian shield district. The Lord Selkirk cruise ship is now offering school educational cruises on Lake Winnipeg.

No report on outdoor education in Canada could be complete without some reference to the St. John's Cathedral Boys' School at Selkirk, Manitoba, a private school for boys which started up in 1958.

Highly controversial in its philosophy, highly demanding physically and academically, deeply rewarding to both staff and students, this small private school (and others it has sponsored) stands out alone in Canada in its Outward Bound, outdoors-oriented curriculum.

SASKATCHEWAN

The outdoor education programs being conducted by the Regina Board of Education and elsewhere in Saskatchewan demonstrate that a prairie type of outdoor environment can be used very effectively; that dedicated and imaginative outdoor education teachers can conduct highly successful lessons out-of-doors in what appears at first sight (to outsiders) to be a rather barren environment.

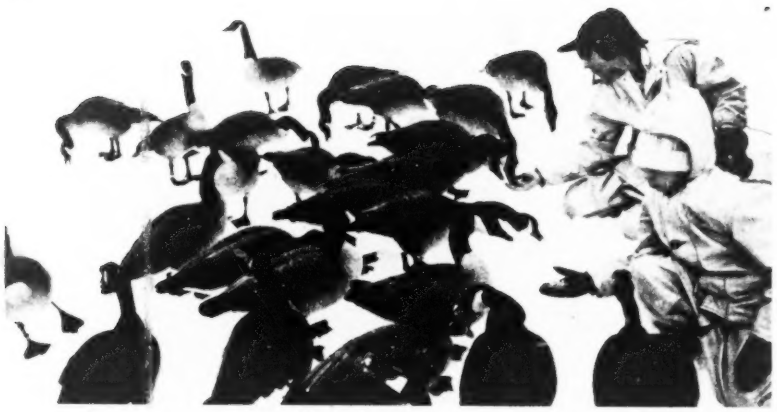
The organizers of a highly successful outdoor education conference held in Regina in early February in 1972 demonstrated another important fact: that outdoor education should be an inter-agency undertaking as well as interdisciplinary. This conference was sponsored by the Saskatchewan Teachers' Federation, the Department of Natural Resources, the Department of Education, the Saskatchewan Camping Association, and the Saskatchewan School Trustees' Association.

The general objectives of outdoor education programs in Saskatchewan are clearly expressed in the conference's brochure.

"We use the outdoors as a rich environment for direct experiences, for exploration, discovery, and adventure in real-life context. Children learn to understand the relevance of their environment, and can develop positive attitudes toward its use and management. They grow through the acquisition of skills which lay a basis for a lifetime of creative living. And in the many social opportunities for co-operative planning and living, the pupils can learn to respect their own, and others', individuality."

Outdoor educators across the nation agree that no one could do a better job of explaining what outdoor education is all about.

There is also general agreement with the four kinds of outdoor education programs set forth in the Regina Public School Board's report. Following is a brief description of each of these well-organized Regina programs.



Single lessons near the school: Here lessons are conducted on or near the school playground where no busing is required. They are relatively short periods involving part of a morning or afternoon.

Half-day experiences: These involve bus transportation to sites in and out of the city - to a park, farm, marsh, eroded valley, lake, archeological site, etc.

Full day experiences: These field trips are usually taken by older pupils (mostly above grade 4) and involve bus transportation to areas of historical, geographical, or geological interest; or the emphasis might be placed on orienteering, snowshoeing or some other kind of outdoor recreation.

Outdoor school or other extended outdoor experiences: The class and their teacher use a bus to get to a camp and some other somewhat isolated area. Here the pupils explore, experiment, study and learn new skills in the new outdoor environment. Sometimes the whole period away from school may be spent travelling by bus or canoe.

The principal of Glen Elm Elementary School in Regina has demonstrated that outdoor education can be integrated into the whole school program. There, all students, staff, and subject areas are involved, and the outdoor theme is very much in evidence all around the school. (An instant forest suddenly appeared outside the school after the winter holidays when the pupils "planted" their

discarded Christmas trees in the snow.)

The University of Saskatchewan - at both the Saskatoon and Regina campuses - are offering credit courses related to outdoor education; as is the province's Institute of Applied Arts and Sciences.

ALBERTA

The famous "Chinook" cloud formations which periodically appear over the Canadian Rockies, heralding a dramatic weather change, are somewhat analagous to the development of outdoor education in Alberta. There is a feeling among many teachers, trustees and others involved that the winds of public opinion are inexorably blowing across the province and that they are on the verge of a big breakthrough.

Some of the earliest attempts to introduce outdoor education into school systems in Canada were made in Alberta; and some of the first reports to be published described school pilot projects in Calgary and Edmonton. These developments may well have been influenced by the program offered by the Faculty of Physical Education at the University of Alberta which was among the first to offer a full credit course in outdoor education.

In 1964 the "Outdoor Education Experiment" (a residential program) was organized by the Colonel Walker School in Calgary. Similar projects that followed eventually led to the establishment, in 1968, of the Outdoor Laboratory School Project, which was organized and supervised by the elementary science department. A further step forward, involving many more pupils and schools, was the Bowmont Education Project, started in 1970.

Camp Kiwanis, ideally located in the foothills of the Rockies, has been widely used by Calgary children for residential programs. Here is another co-operative undertaking: the facilities are provided by the local Kiwanis Club and financial support comes from the Calgary Public School Board, the Alberta Department of Culture, Youth and Recreation, and the Rotary Club of Calgary.

Progress in Alberta was encouraged by provincial legislation which became effective on August 1, 1970. Section 138 (c) of The School Act gives school boards authority to:

"Arrange for, undertake or sponsor, for its pupils and at its own cost or otherwise, educational, cultural, or recreational trips inside or outside its district or division."

Alberta appears to have been much more successful in introducing outdoor education into the secondary schools (participation is estimated at about 40%) than elsewhere in Canada. Excellent progress has also been made in the elementary schools - about half of them are involved in some kind of outdoor program.

This kind of progress has been strongly influenced by the rapid developments taking place in Edmonton. The Edmonton Public School Board was one of the first boards in western Canada to appoint a full-time consultant in outdoor education. Edmonton schools (both public and separate) are working more closely with the Alberta Department of the Environment and other government departments in establishing an outdoor study area. Both school boards hope to take full

advantage of the new 240-acre Alberta Outdoor Education Centre, built by the Department of Culture, Youth and Recreation.

Throughout the province, schools report that, although they welcome the fact that the provincial universities, community colleges and institutes of technology are offering useful outdoor education courses, teachers still need more preparation in outdoor education and environmental studies. They are attempting to meet this urgent need by providing weekend workshops and in-service training programs.

A most complete document on outdoor education was submitted to the Calgary Public School Board in March, 1972. This report, A Brief on Outdoor Education in Calgary, was prepared by the Elementary Superintendents Committee on Outdoor Education, working under the direction of the Supervisor of Science. It is a document that is highly recommended to other provincial and municipal outdoor education committees for careful perusal.

One of the most recent and province-wide steps taken was the organization of a special outdoor education conference in January, 1972. This conference brought together - by invitation - approximately 70 men and women representing a variety of organizations already committed to or involved in outdoor education and environmental studies.

The purpose of the conference was:

"To explore the desirability and feasibility of establishing a closer working relationship among the many Alberta organizations, agencies and institutions with a view to providing the public with improved and co-ordinated outdoor education services."

Needless to say, the conference was very successful and charted a course of action that is being followed energetically by a special committee.

This approach is highly recommended to other provinces. One of the most important concepts behind this kind of conference is the recognition that the school is only one important agency contributing to the total education of our young people. Also, such a conference provides a format for meaningful community involvement. (One cannot help but wonder if our school programs would not be more effective if other areas of formal education accepted this philosophy.)

BRITISH COLUMBIA

British Columbia's climate and topography certainly can provide magnificent opportunities for outdoor education and environmental studies. But important educational change often appears to move slowly here, as elsewhere in Canada - particularly for outdoor education enthusiasts. Much of the progress that has been made in Canada, and many of the problems still to be resolved, are described clearly and accurately in the British Columbia report prepared by Margaret Ramsay, Chairman of the British Columbia Committee on Outdoor Education, and Dr. Milton McLaren, Director of Continuing Education at Simon Fraser University. (This is a report every outdoor educator should read.)

British Columbia has found that in many cases the first initiative in outdoor education has come from local individuals or groups of teachers. And the universities are now actively involved in outdoor and environmental education. Voluntary organizations and non-profit societies such as "Outward Bound" are also very active here.

Most leadership has been from science-oriented teachers, but physical education and social studies are now becoming involved.

Most programs are supported by students and parents, via fees. Some school board funds are also used for operations, but boards are at this time not permitted to spend capital funds on the construction of outdoor education buildings.

"The major problem", says a B.C. spokesman, "is lack of leadership from the Department of Education, creating the feeling among school administrators that outdoor education is a 'frill'. In B.C. the formula financing system also makes it very difficult to develop programs outside the so-called core area. The Department of Education is really only now considering the degree and type of support which it can give to outdoor education, if any.

"The B.C. Departments of Lands and Forests, Recreation and Conservation", the same spokesman said, "have expressed some desire to assist school districts in the acquisition of lands by lease, but so far nothing much has been done. Furthermore, these departments see no reason to encourage school districts to gain exclusive use of tracts of land for this purpose."

Pupils in proper apiarian garb examine one of the six beehives kept at the North Vancouver Outdoor School.

Probably less than 25% of the school districts in the province have formal outdoor education or environmental education programs. Most programs are in the elementary grades, especially grades 6 - 7. Some high schools have programs but they are quite exceptional. But now that secondary schools have a more flexible program, able to offer approved options, more are likely to institute outdoor education and environmental studies.

Many districts are now making plans for beginning environmental education and outdoor education programs and there will probably be increasing pressure to acquire and develop sites.

Many residential school programs are run in camp facilities rented from volunteer organizations, such as the United Church and the YMCA. The camps are normally leased, and in some cases, the lease rates are quite high, even during the off season. Some men's service clubs have aided school districts with free labour, free materials and other support. The Wildlife Clubs in some areas have also supported programs in the outdoors. The Canadian Forestry Association has also made camp facilities available. In some areas the PTA assists by providing money from various fund-raising activities. To date, however, community support is not being fully sought or exploited.

Provincial legislation and regulations do not prohibit school trips for one full day, overnight, or extended periods. Although the value of field work is mentioned in various curriculum guides, these activities are often restrained because of limited funds, and lack of available transportation. Some districts are also concerned about their liability in the event of injury or death to students while they are on a field trip .

School districts in B.C. are not permitted to own land outside their district boundaries - a serious obstacle to the urban districts.

In a position statement: "Outdoor and Environmental Education in British Columbia", the Outdoor Education Committee of the B.C. Teachers' Federation expressed some hopes for the future which could be well applied to all outdoor education in Canada.

"In re-thinking priorities in the school system, the concept of using the out-of-doors as a learning centre should be an established principle.

"Outdoor and environmental education should be integrated into the curriculum from kindergarten to college.

"Outdoor education should become truly multi-disciplinary.

"School boards and districts should be encouraged to provide co-ordination of outdoor education programs and in-service training of teachers, so that preparation and follow-up can be more thoroughly integrated with outdoor experiences.

"More flexibility in secondary school time-tabling should be allowed in order to make possible extended outdoor experiences.

"Teacher training institutions should make available outdoor and environmental education to all their students."

Alphabet of activities

Here is the merest sampling, obviously incomplete, of some of the special or unusual kinds of different programs.

BOLTON OUTDOOR EDUCATION CENTRE is a co-operative residential outdoor education centre, which will accommodate approximately 150 students at one time. It is staffed and operated (in rented facilities) by the school boards of the Boroughs of Etobicoke, York,and East York.

ECOLOGICAL RESERVE has been established for outdoor education in Trinity Valley for Vernon (B.C.) students. Burns Bog serves as an ecological study area for Delta pupils on day trips.

HAMILTON is possibly the first school board in the Western World to send a group of high school students to China for three weeks. This ambitious and highly successful venture was undertaken in May, 1972.

HIGH SCHOOL CREDIT COURSES - Some junior and senior high school credit courses relating to outdoor education and environmental studies (usually offered by geography, science or physical educational departments) have been approved by the Ontario Ministry of Education.

KAMLOOPS - A summer institute in environmental education gives total immersion credit programs in Environmental Education for teachers.

METROPOLITAN TORONTO AND REGION CONSERVATION AUTHORITY co-operates with school boards in offering one of the largest conservation education programs in Canada at Albion Hills, Claremont and Cold Creek Conservation Field Centres.

METROPOLITAN TORONTO SEPARATE SCHOOL BOARD offers a multi-disciplinary outdoor education program, and organizes one of the largest (1,500) student exchange programs with Quebec City.

MUSKOKA'S out-of-school program is one of the oldest and

most progressive. Senior students are involved in biological research with the Ontario Ministry of Lands and Forests.

NORTH YORK has one of the largest and most successful outdoor education programs in North America. The board also operates a loan service (canoes, tents, snowshoes etc.) for all borough schools.

OTTAWA operates their MacSkimming Outdoor Science Centre on the Ottawa River. It includes a farm operation, maple sugar program and market garden.

OUTWARD BOUND PROGRAMS - instituted in Ontario at the Atikokan High School - are being used at several other schools in modified form.

PARKWAY VOCATIONAL SCHOOL'S (Toronto) program involves almost all staff and students in a two-week work-study program at camp Kandalore each year.

SEED - Shared Experience, Exploration and Discovery is an unusual out-of-school program offered to a small number of students by the Toronto Board of Education. It has no formal structure and uses the real world as a classroom.

SQUAMISH has a student constructed park and waterfowl refuge. Grade 10 students are involved in an environmental sciences program, and there is a community action program as well.

STUDENT FUND RAISING - The students of Ancaster High and Vocational School raised $10,000 to help the Hamilton Region Conservation Authority purchase Niagara Escarpment lands.

TEACHER EDUCATION - credit courses in outdoor education are being offered by numerous faculties of education across the country. Simon Fraser University with the Outward Bound School at Keremeos offers an outward bound practicum for teachers.

TORONTO - The Toronto Board of Education is building the Boyne River Natural Science Centre on 212 acres near Alliston, Ontario. It will accommodate 144 students and will have eight teachers on staff.

UNIVERSITIES - An increasing number of undergraduate courses are being introduced, usually to the biology, zoology and anthropology departments. Schools of Physical Education are placing much more emphasis on outdoor recreation and camping residential experiences.

SOME RECOMMENDATIONS

1. The first and most important conclusion is that outdoor environmental education is here to stay, and will gradually become woven into the whole fabric of the Canadian educational system.

2. The time is long overdue for provincial departments of education to change from a passive and permissive role and offer much more leadership and financial support.

3. Boards of education should carefully examine their long established educational priorities by simply asking two important questions:

   How well is our present educational system meeting the real needs and interests of our young people?

   How well are we really preparing them today for the kind of lives they are going to live tomorrow?

4. All people concerned with the educational process - teachers, parents and administrators - must take a good hard look at <u>what</u> we are teaching and <u>how</u> we are teaching.

5. The single, most important factor in any successful out-of-school venture is the interest, competence and enthusiasm of the teachers involved.

6. There is an urgent need for many more university extension courses in outdoor education and environmental studies. The need is just as urgent for more in-service training programs, workshops, and conferences.

7. For economic and other reasons we must make full use of existing facilities and other resources that can be found in any school community.

Some final comments

Everybody agrees that the outdoor education lesson should be an extension of work taught in the classroom, but if we end up doing nothing more than merely teaching geography, science or physical education in the out-of-doors, we have, in my opinion, failed to accomplish one of the most urgent objectives.

Surely, in view of the world-wide environmental crisis, one of our most important goals should be to develop in our students a much better understanding and concern for their outdoor environment.

These things we can do

A good program of outdoor education and environmental studies can:

- develop an interest and concern for the outdoor environment;

- provide challenge and adventure now missing in the lives of many young people;

- enable them to discover the real satisfaction that comes from worthwhile work projects and voluntary service.

Most teachers who become involved in outdoor education usually do so because they are already interested in camping or some other outdoor activity; they also have a genuine interest in young people and in the conservation of our natural resources.

But we have now passed the early development stage where they alone can continue to provide the time and effort

required in addition to their normal teaching duties and responsibilities.

One of the problems of the interdisciplinary approach to outdoor education - articulated far too often by boards of education and departments of education - is that if all subject areas are involved in this teaching method, no special teachers or consultants are required.

But if important progress is to be made in outdoor environmental education, some knowledgeable and enthusiastic teacher or "co-ordinator" (free of other responsibilities) must provide full-time leadership.

We must ask ourselves too why so many young people are opting out of school. (Nearly 10% per year in some school areas.) Do they quit from boredom because they find our courses dull and irrelevant? Is it because many of them are disillusioned with many of the goals of our money-hungry resource-destroying society?

Outdoor environmental education is certainly <u>not</u> the answer to <u>all</u> our educational problems. But there is growing recognition that it is a method of teaching that can add that other important "R" to every subject on the curriculum - *relevance in what we teach about the world in which our young people live!*

Selected Canadian reference materials

One of the best indications that we are reaching a level of professional maturity in outdoor education is the large number of articles that have been written by Canadians during the last few years.

At the risk of being accused of chauvinism we have chosen to list in this section Canadian reference material only. Because, after all, this report is called "Outdoor Education in Canada".

The reference material is by no means complete. But almost every textbook, article and manual listed has been reviewed in preparing this report. All of the material is recommended as further sources of information.

It is important to emphasize that we are not suggesting that teachers and administrators responsible for outdoor education should neglect the many excellent textbooks and periodicals produced in Great Britain, the United States, and other countries. On the contrary, we must keep completely informed about the progress, problems and changing philosophies that are taking place in outdoor and environmental education all over the world.

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"The first thing is to reform the curriculum so that, instead of separate 'subjects' to be taken piecemeal, growing minds are offered a nutritious core of human knowledge, ideas, techniques and achievements, covering science and history as well as the arts and manual skills.

"The key subject must be ecology, both biological and human — the science of balanced interaction between organisms and their environment (which of course includes other organisms) together with its practical application and in the conservation of the world's resources, animal, vegetable, mineral and human."

— Sir Julian Huxley

Canadian Education Association